

## ABSTRAC

1           A method for mechanically supporting a integrated circuit (IC) package having a  
2 column grid array (CGA) interconnection with a printed circuit board (PCB) is provided  
3 by inserting a supporting device between the IC package and the PCB after the IC  
4 package is solder attached to the PCB. The supporting device is removably and  
5 mechanically fastened to the PCB and is designed in such a shape so that the supporting  
6 device cannot come into contact with the solder columns of the CGA to cause damage or  
7 shorting. This invention eliminates the maximum retention load constraint of the IC  
8 package and enables a wide variety of thermal solution implementations without  
9 comprising reliability.